



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| | | | | |
|------------------------------------------------------------------------------------|-------------|----------------------|-------------------------------|------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/523,901 | 08/17/2005 | Bernhard Mattes | 10191/3722 | 7561 |
| 26646 7590 10/09/2007 KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004 | | | EXAMINER RADKIEWICZ, JARED | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2624 | |
| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 10/09/2007 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@kenyon.com

| | | | |
|----------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------|--|
| <p align="center">Office Action Summary</p> | <p>Application No.</p> <p align="center">10/523,901</p> | <p>Applicant(s)</p> <p align="center">MATTES ET AL.</p> | |
| | <p>Examiner</p> <p align="center">Jared W. Radkiewicz</p> | <p>Art Unit</p> <p align="center">2624</p> | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 12-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>2/2/2005</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Amendments

This office action is responsive to the preliminary claim and specification amendment received on 2/2/2005. **Claims 12 - 22** remain pending.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 12 and 13** are rejected under 35 U.S.C. 102(b) as being anticipated by Zander et al. (English translation of DE 198,56,129 A1 abstract provided by Derwent).

Regarding **claim 12**, Zander teaches an apparatus for obtaining physiological data of at least one person, comprising:

at least one sensor for detecting the physiological data ("anthropometric data depending on sensor and/or image acquisition", Zander Abstract); and

a control unit for determining, on the basis of the physiological data, the age of the at least one person ("An age determination and/or gender determination is made from the image acquisition data", Zander Abstract).

Regarding **claim 13**, Zander teaches the apparatus as recited in claim 12, wherein the at least one sensor is an image transducer ("sensor and/or image acquisition", Zander Abstract).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Zander et. al (English translation of DE 198,56,129 A1 abstract provided by Derwent) in view of White et al. (US 5,071,160).

Regarding **claim 16**, Zander teaches claim 13.

Zander does not teach the apparatus as recited in claim 13, further comprising an ultrasound spacing sensor for measuring the spacing of the at least one person from an air bag cover.

White teaches an air bag system that measures the position of a passenger using an ultrasonic device ("an ultrasonic acoustic sensor 26 comprising an ultrasonic transmitter and detector for sensing the position assumed by the passenger", White Column 4 Line 42).

It would have been obvious at the time of invention to one of ordinary skill in the art to provide the passenger detection system of Zander with the ultrasonic sensor of White to provide more passenger location information to correctly deploy an air bag.

5. **Claims 14, 15, and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Zander et. al (English translation of DE 198,56,129 A1 abstract provided by Derwent) in view of Amir et al. (US 6,393,136) and Roffman et al. (US 5,448,312).

Regarding **claim 14**, Zander teaches claim 13.

Zander does not teach the apparatus as recited in claim 13, wherein the image transducer is a stereo video sensor, and wherein the video sensor is assigned an evaluation module configured to measure the pupil size of the at least one person, and the pupil size is utilized in determining the age.

Amir teaches a stereo vision system used to measure pupil size (Figure 1 illustrates a stereo vision system consisting of cameras 104 and 105 used to measure the "pupils size", Amir Column 7 Line 10).

It would have been obvious at the time of invention to one of ordinary skill in the art to use the stereo vision apparatus of Amir as the image acquisition in Zander because it is particularly suited to capture eye image data as required by Zander and further provides age specific metrics based on the acquired image.

Zander and Anil do not teach using the measured pupil size to determine the age of the user.

Roffman teaches that pupil size is directly related to age (Roffman Table 1).

It would have been obvious at the time of invention to one of ordinary skill in the art to use the pupil size as measured in the Zander and Amir combination to determine a persons age because there is a well documented direct relationship between the two as demonstrated by Roffman, all that is needed is the lookup table provided by Roffman.

Regarding **claim 15**, Zander, Amir, and Roffman teach the apparatus as recited in claim 14, wherein the video sensor is configured for triangulation measurement ("the cameras 104-105 are first used together to measure distance to the subject", Amir Column 9 Line 22).

Regarding **claim 17**, Zander, Amir, and Roffman teach the apparatus as recited in claim 14, wherein the control unit correlates the measurement of the pupil size with at least one further measured value for determining the age ("depending on sensor and/or image acquisition", Zander Abstract).

Claims 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zander et. al (English translation of DE 198,56,129 A1 abstract provided by Derwent), Amir et al. (US 6,393,136), and Roffman et al. (US 5,448,312) in view of Beardsly (US 6,154,559).

Regarding **claim 18**, Zander, Amir, and Roffman teach claim 17.

The Zander, Amir, and Roffman combination does not teach the apparatus as recited in claim 17, wherein the control unit uses hair color, smoothness of face, and skin texture of the at least one person as the at least one further measured value.

Beardsly teaches a facial imaging system that identifies users based on hair color, smoothness of face, and skin texture ("The subject system automatically records the texture or visual appearance of the individual's face, such as skin color, hair color", Beardsly Column 2 Line 32).

It would have been obvious at the time of invention to one of ordinary skill in the art to use hair color, smoothness of face, and skin texture as alternate measured values in the apparatus of Zander, Amir, and Roffman as further user identification as demonstrated by Beardsly (Figure 2B) because both systems are relating to facial identification and the requisite imaging device is already present in the Zander, Amir, and Roffman combination.

Claims 19-22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zander et. al (English translation of DE 198,56,129 A1 abstract provided by Derwent), Amir et al. (US 6,393,136), and Roffman et al. (US 5,448,312) in view of Igaki et al. (US 2002/0101337 A1).

Regarding **claim 19**, Zander, Amir, and Roffman teach claim 17.

The Zander, Amir, and Roffman combination does not teach the apparatus as recited in claim 17, further comprising a pressure pick-up for measuring a pulse rate of

Art Unit: 2624

the at least one person, wherein the control unit uses the pulse rate of the at least one person as the at least one further measured value.

Igaki teaches an in car system responsive to a pulse rate ("a moment at which the operator's heart pulse rate has reached a predetermined upper limit", Igaki Paragraph 36)

It would have been obvious at the time of invention to one of ordinary skill in the art to employ the pulse rate information gathering of Igaki as an alternate metric measured in the Zander, Amir, and Roffman combination because both systems are related to in-car biometrics.

Regarding **claim 20**, Zander, Amir, Roffman, and Igaki teach claim 19.

The Zander, Amir, Roffman and Igaki combination as applied to claim 19 does not teach the apparatus as recited in claim 19, wherein the pressure pick-up is positioned in one of a steering wheel and in a vehicle seat.

Igaki teaches an in car system with pressure sensors in the steering wheel detecting a moment at which the force of gripping of the steering wheel of the vehicle by the operator has increased to a predetermined upper limit", Igaki Paragraph 36)

It would have been obvious at the time of invention to one of ordinary skill in the art to employ the pulse rate information gathering of Igaki as an alternate metric measured in the Zander, Amir, and Roffman combination because both systems are related to in-car biometrics.

Regarding **claim 21**, Zander, Amir, and Roffman teach claim 17.

The Zander, Amir, and Roffman combination does not teach the apparatus as recited in claim 17, wherein the at least one further measured value includes an electrical parameter of the at least one person.

Igaki teaches an in car system responsive to an electrical pulse rate ("a moment at which the operator's heart pulse rate has reached a predetermined upper limit", Igaki Paragraph 36)

It would have been obvious at the time of invention to one of ordinary skill in the art to employ the pulse rate information gathering of Igaki as an alternate metric measured in the Zander, Amir, and Roffman combination because both systems are related to in-car biometrics.

Regarding **claim 22**, Zander, Amir, and Roffman teach claim 17.

The Zander, Amir, and Roffman combination does not teach the apparatus as recited in claim 17, wherein the at least one further measured value includes a weight of the at least one person.

Igaki teaches an in car system responsive to the weight of a user ("pressure acting on the operator's seat", Igaki Paragraph 36)

It would have been obvious at the time of invention to one of ordinary skill in the art to employ the weight measuring of Igaki as an alternate metric measured in the Zander, Amir, and Roffman combination because both systems are related to in-car biometrics, and weight relatable to age.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared W. Radkiewicz whose telephone number is (571) 270-1577. The examiner can normally be reached on 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian P. Werner can be reached on (571) 272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JWR



BRIAN WERNER
SUPERVISORY PATENT EXAMINER